

CLAIMS

What is claimed is:

- 5 1. A reciprocating compressor, comprising:
a rotating shaft rotated by a drive unit which generates a rotating force;
an eccentric shaft eccentrically rotated by the rotating shaft;
- 10 a piston to reciprocate by a force transmitted from the eccentric shaft, thus compressing a refrigerant;
a connecting rod having, on an end thereof, an eccentric shaft mounting hole so that the eccentric shaft is mounted to the end of the connecting rod, the connecting rod converting a
15 rotating motion of the eccentric shaft into a reciprocating motion to reciprocate the piston;
a bush placed between the eccentric shaft mounting hole and the eccentric shaft to fill a space between the eccentric shaft mounting hole and the eccentric shaft, with a hinge hole
20 being provided at a predetermined portion of the bush to allow the eccentric shaft to be rotatably fitted into the hinge hole;
a fitting recess provided on one of the eccentric shaft mounting hole and the bush; and
a fitting projection provided on a remaining one of the
25 eccentric shaft mounting hole and the bush to correspond to the

fitting recess, the fitting projection engaging with the fitting recess through a press-fitting process.

2. The reciprocating compressor according to claim 1,
5 wherein

the bush and the eccentric shaft mounting hole are provided so that an outer diameter of the bush and an inner diameter of the eccentric shaft mounting hole are determined to provide a sliding allowance, thus allowing the bush to slide in
10 the eccentric shaft mounting hole, and

the fitting projection and the fitting recess are provided so that sizes of the fitting projection and the fitting recess are determined to provide a fitting allowance, thus allowing the fitting projection to be press-fitted into the fitting
15 recess, and allowing the bush to be press-fitted into the eccentric shaft mounting hole through an engagement of the fitting projection with the fitting recess.

3. The reciprocating compressor according to claim 2,
20 wherein the fitting projection and the fitting recess are provided so that an end surface of the fitting projection and an inner end surface of the fitting recess are determined to provide the sliding allowance, and both side surfaces of the fitting projection and both inner side surfaces of the fitting
25 recess are determined to provide the fitting allowance.

4. The reciprocating compressor according to claim 1,
wherein

the fitting recess comprises a plurality of fitting
5 recesses provided around the bush or the eccentric shaft
mounting hole at regular intervals, and

the fitting projection comprises a plurality of fitting
projections provided around the remaining one of the bush and
the eccentric shaft mounting hole at regular intervals.